L Number	Hits	Search Text	DB	Time stamp
-	53958	(("175") or ("166")).CLAS.	USPAT;	2002/11/13 14:30
			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT	
-	11	(((175/\$) or (166/\$)).CCLS.) and (jar with housing with mandrel with	USPAT;	2002/11/13 14:48
	i 	coupl\$3)	US-PGPUB,	
		· · · · · · · · · · · · · · · · · · ·	ЕРО; ЛРО;	
	ļ		DERWENT	
_	4	(("5086853") or ("4508174")).PN.	USPAT;	2002/11/13 14:50
	ĺ	, , , , , , , , , , , , , , , , , , , ,	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
_	232	(166/178).CCLS.	USPAT;	2002/11/13 15:17
	252	(100,170),0020.	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
_	11	("Re28768" "0046815" "0051136" "1214622" "1450024"	USPAT	2002/11/13 15:24
		"2305261" "2628820" "2739654" "3054454" "3358765"		
		"4427064").PN.		
_	6	4736797.URPN.	USPAT	2002/11/13 15:27
	5	("2706616" "2847655" "3817345" "4245313" "4319240").PN.	USPAT	2002/11/14 08:33
1 _	10	2706616.URPN.	USPAT	2002/11/14 08:33
-	4		USPAT	2002/11/14 08:52
	8	("4648444" "4685516" "4697641" "4706744" "4736797"	USPAT	2002/11/14 08:57
ļ -	8	"4753291" "4759406" "4776393").PN.	OBITI	2002/11/14 08.57
	6	5109921.URPN.	USPAT	2002/11/14 09:01
•	6	("2187007" "2620029" "3024844" "3957118" "4098342"	USPAT	2002/11/14 09:06
-	i	(2187007 2020027 3024644 3737116 4070342 4624308").PN.	OBIAI	2002/11/14 07:00
	9	4706744.URPN.	USPAT	2002/11/14 09:10
-	0	"081961"	US-PGPUB	2002/11/14 03:16
-	181	((((175/\$) or (166/\$)).CCLS.) and jar) and housing and mandrel and	USPAT;	2002/11/26 13:55
-	101	coupl\$3	US-PGPUB;	2002/11/20 15.55
		Coupius	ЕРО; ЛРО;	
			DERWENT	
	0	((((((175/\$) or (166/\$)).CCLS.) and jar) and housing and mandrel and	US-PGPUB	2002/11/26 13:56
		coupl\$3) and vibrator	0510102	2002:11:20
	0	(((((175/\$) or (166/\$)).CCLS.) and jar) and housing and mandrel and	US-PGPUB	2002/11/26 13:56
-		coupl\$3) and (drilling adj hammer)	05-1 01 05	2002/11/20 15:50
	937	(((175/\$) or (166/\$)).CCLS.) and jar	USPAT;	2002/11/26 14:24
-	757		US-PGPUB;	2002/11/20 1 //2 /
			ЕРО; ЛРО;	
1			DERWENT	
	0	(((((175/\$) or (166/\$)).CCLS.) and jar) and vibrator	US-PGPUB	2002/11/26 13:56
	0	((((175/\$) or (166/\$)).CCLS.) and jar) and (drilling adj hammer)	US-PGPUB	2002/11/26 13:56
	1 1	((((175/\$) or (166/\$)).CCLS.) and jar) and housing and mandrel and	USPAT;	2002/11/26 14:13
-	'	coupl\$3) and vibrator	US-PGPUB;	
		Couples) and Holator	EPO; JPO;	
			DERWENT	
	0	((((((175/\$) or (166/\$)).CCLS.) and jar) and housing and mandrel and	USPAT;	2002/11/26 14:19
-		coupl\$3) and (drilling adj hammer)	US-PGPUB;	2302,11,20 11,13
1	1	Combine) and (arming any naminor)	EPO; JPO;	
			DERWENT	
	10	(((((175/\$) or (166/\$)).CCLS.) and jar) and vibrator	USPAT;	2002/11/26 14:24
-	10	((((173/4) of (100/4)).CCES.) and jail and violator	US-PGPUB;	2002/11/20 13.23
			ЕРО; ЛРО;	
			DERWENT	
	1	(((((175/\$) or (166/\$)).CCLS.) and jar) and (drilling adj hammer)	USPAT;	2002/11/26 14:20
-	1	((((1/3/4) of (100/4)).COES.) and jai) and (diffining adjinamilier)	US-PGPUB;	2002/11/20 14.20
			EPO; JPO;	
1			DERWENT	
L	1		DELLANDIAL	L

Companies Comp			1 (((1)) ((1)) ((1))		1
Comparison of the Comparison	-	0	(((175/\$) or (166/\$)).CCLS.) and ((drill adj bit) near5 vibrator)	USPAT;	2002/11/26 14:26
-	ļ				
Company Comp	ļ			ЕРО; ЛРО;	
US-PGPUE FPO, IPO, DERWENT USPAT, USPA				DERWENT	
US-PGPUB; PFO, JPO, DERWENT USPAT;	-	1	(((175/\$) or (166/\$)).CCLS.) and ((drill adj bit) near10 vibrator)	USPAT;	2002/11/26 14:25
- 35 ((((175/\$) or (166/\$)).CCLS.) and (drilling adj hammer) - 3 ((((175/\$) or (166/\$)).CCLS.) and (jar near5 actuator) - 0 ((((175/\$) or (166/\$)).CCLS.) and jar and (free near5 striking near5 near5 ((((175/\$) or (166/\$)).CCLS.) and jar and (free near5 striking near5 near5 ((((175/\$) or (166/\$)).CCLS.) and jar and (free near5 striking near5 near5 ((((175/\$) or (166/\$)).CCLS.) and (jar near5 orifice near5 (open closed)) - 1 ((((175/\$) or (166/\$)).CCLS.) and (jar near5 orifice near5 (open closed)) - 158 ((((175/\$) or (166/\$)).CCLS.) and (jar near5 orifice near5 (open closed)) - 158 ((((175/\$) or (166/\$)).CCLS.) and (jar near5 orifice near5 (open closed)) - 126 (((((175/\$) or (166/\$)).CCLS.) and (jar near5 orifice near5 (open closed)) - 126 ((((((175/\$) or (166/\$)).CCLS.)) and (jar near5 orifice near5 (open closed)) - 127 (((((((((((((((((((((((((((((((((((
Solution					
- 35 (((175/\$) or (166/\$)) CCLS.) and (drilling adj harmner)					
Company Comp		35	(((175/\$) or (166/\$)) CCI \$) and (drilling adi hammer)		2002/11/26 14:27
Comparison	-]	(((175/4) of (100/4)). CCES.) and (writing adj nathrici)		2002/11/20 14.27
-					
Company Comp					
Comparison of the comparison			(4.55.40) (4.66.40) (GT Q.) (4.66.40)	1	
- 0 (((175/\$) or (166/\$)).CCLS.) and jar and (free near5 striking near5	-] 3	(((175/\$) or (166/\$)).CCLS.) and (jar near) actuator)		2002/11/26 15:05
Company	-				
-				ЕРО; ЈРО;	
Tange				DERWENT	
PFO, JPO, DERWENT USPAT; US-PGPUB, EPO, JPO, DERW	-	0	(((175/\$) or (166/\$)).CCLS.) and jar and (free near5 striking near5	USPAT;	2002/11/26 15:06
PFO, JPO, DERWENT USPAT; US-PGPUB, EPO, JPO, DERW					
-				,	
-					
- 158 (175/297).CCLS. US-PGPUB, EPO, IPO, DERWENT USPAT; US-PGPUB, EPO, IPO, DERWENT USPAT; USPAT; US-PGPUB, EPO, IPO, DERWENT USPAT; US-PGPUB, EPO, IPO, IPO, IPO, IPO, IPO, IPO, IPO, I		1	(((175/\$) or (166/\$)) CCI \$) and (iar near5 orifice near5 (open closed))		2002/11/26 15:06
- 158 (175/297).CCLS. EPO, IPO, DERWENT USPAT; US-POPUB; EPO, IPO, IPO, IPO, IPO, IPO, IPO, IPO, I		•	(((1757\$) of (1007\$)). CCES.) and that hears of free flears (open closed))		2002/11/20 15.00
- 158 (175/297).CCLS. DERWENT USPAT; US-PGPUB; EPO, IPO, DERWENT US-PGPUB; EP					
158					
US-PGPUB; EPO; PO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO;		1.50			
EPO, IPO, DERWENT USPAT, US-PGPUB, EPO, IPO, DERW	-	158	(175/297).CCLS.		2002/11/27 07:39
DERWENT USPAT; US-PGPUB; EPO, JPO; DERWENT USPAT;					
- 126 (175/55).CCLS. USPAT; US-PGPUB; EPO, JPO; DERWENT USPAT; US-PGPUB; EPO, JPO; DER				ЕРО; ЈРО;	
US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO;				DERWENT	
US-PGPUB; EPO; IPO; DERWENT USPAT; US-PGPUB; EPO; IPO; IPO; IPO; IPO; IPO; IPO; IPO; I	-	126	(175/55).CCLS.	USPAT;	2002/11/27 07:39
EPO; JPO; DERWENT US-PGPUB; EPO; JPO; JPO; DERWENT US-PGPUB; EPO; JPO; DERWENT US-PGPU					
- 226 (175/92).CCLS. DERWENT USPAT; US-PGPUB; EPO, PPO, DERWENT US-PGPUB; EPO, PPO, PPO, DERWENT US-PGPUB; EPO, PPO, PPO, DERWENT US-PGPUB; EPO, PPO, PPO, PPO, PPO, PPO, PPO, PP				,	
- 226 (175/92).CCLS. USPAT; US-PGPUB; EPO; IPO; DERWENT USPAT; US-PGPUB; EPO; IPO; DER					
- 234 (175/293).CCLS. US-PGPUB; EPO, IPO, DERWENT USPAT; US-PGPUB; EPO; IPO; DERWENT U	_	226	(175/92) CCLS	1	2002/11/27 07:41
EPO; IPO; DERWENT USPAT; US-PO; DERWENT USPAT; US-PO; IPO; DERWENT US-PO; IPO; DERWENT USPAT; US-PO; IPO; DERWENT US-PO; IPO; IPO; IPO; IPO; IPO; IPO; IPO; I			(1737)2).0005.		2002/11/27 07.41
- 234 (175/293).CCLS. DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT US-PGPUB; EPO;				1	
- 234 (175/293).CCLS. USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; JPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; JPO; JPO; JPO; JPO; JPO; JPO; J					
- 383 (175/73).CCLS. - 265 (166/301).CCLS. - 265 (166/301).CCLS. - 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 2003/02/25 10:28 US-PGPUB; EPO, JPO; DERWENT		224	(175/003) 001.0	l.	2002/11/27 07.42
- 383 (175/73).CCLS. EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PG	-	234	(175/293).CCLS.		2002/11/2/07:42
- 383 (175/73).CCLS. DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO;					
- 265 (166/301).CCLS. USPAT; US-PGPUB; EPO, JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DE					
- 265 (166/301).CCLS. 265 (166/301).CCLS. US-PGPUB; EPO; JPO; DERWENT US-PGPUB; EPO;				1	
- 265 (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (189AT; US-PGPUB; EPO; JPO; DERWENT USPAT; US	-	383	(175/73).CCLS.		2002/11/27 07:43
- 265 (166/301).CCLS. (166/301).CCLS. (166/301).CCLS. (106/301).CCLS. (106/301).CCLS. (106/301).CCLS. (106/301).CCLS. (108/PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT U					
- 265 (166/301).CCLS. USPAT; US-PGPUB; EPO, JPO; DERWENT USPAT; (signal power) USPAT; US-PGPUB; EPO, JPO; DERWENT USPAT					
- 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power)			· ·		
- 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 (signal power) US-PGPUB; EPO; JPO; DERWENT US-PGPUB; EPO; JPO; DERWEN	-	265	(166/301).CCLS.	USPAT;	2002/11/27 07:43
- 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 USPAT; US-PGPUB; EPO; JPO; DERWENT - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) USPAT; USPGPUB; EPO; JPO; DERWENT - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) USPAT; USPGPUB; EPO; JPO; DERWENT - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) USPAT; USPGPUB; EPO; JPO;				US-PGPUB;	
- 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) - 2003/02/25 10:28 - 2003/02/25 10:28					
- 0 (downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5 USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT;					
(signal power) (signal power) US-PGPUB; EPO; JPO; DERWENT US-PGPUB; EPO; JPO; US-PGPUB; EPO; JPO; DERWENT US-PGPUB; EPO; JPO;	-	n	(downhole adj tool) near5 housing near5 mandrel near5 actuat\$3 near5		2003/02/25 10:27
- 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO;					
- 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT - 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO;			(c.B.m. house)		
- 0 (downhole adj tool) near5 housing near5 mandrel near5 (signal power) USPAT; US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; power) 2003/02/25 10:28					
US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; power) US-PGPUB; EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; EPO; JPO;			(doumbale adj tool) near5 haveing near5 manded near5 (signal near5)	i e	2003/02/25 10:29
EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO; DERVENT USPAT; US-PGPUB; EPO; JPO;	-]	(signal power)		2003/02/23 10.28
- 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) DERWENT USPAT; US-PGPUB; EPO; JPO;					
- 1 (downhole adj tool) near10 housing near10 mandrel near10 (signal power) US-PGPUB; EPO; JPO;					
power) US-PGPUB; EPO; JPO;	1			{	
EPO; JPO;	-	1	1, , , , , , , , , , , , , , , , , , ,		2003/02/25 10:28
			power)		
DERWENT					
				DERWENT	

-	0	jar near5 housing near5 mandrel near5 (signal power)	USPAT; US-PGPUB;	2003/02/25 10:28
-	1	jar near10 housing near10 mandrel near10 (signal power)	EPO; JPO; DERWENT USPAT;	2003/02/25 10:28
			US-PGPUB; EPO; JPO; DERWENT	
-	10	jar same housing same mandrel same (signal power)	USPAT; US-PGPUB; EPO; JPO;	2003/02/25 10:28
-	7	(((175/\$) or (166/\$)).CCLS.) and (jar near5 electric)	DERWENT USPAT; US-PGPUB;	2004/06/02 13:19
-	4	((166/178).CCLS.) and (166/65.1 166/66 166/66.4-66.7)	EPO; JPO; DERWENT USPAT; US-PGPUB;	2003/02/25 10:34
-	0	(((175/\$) or (166/\$)).CCLS.) and (electr\$4 adj jar)	EPO, JPO; DERWENT USPAT; US-PGPUB;	2003/02/25 10:35
-	8	(("2153883") or ("3191677") or ("3424244") or ("3528498") or	EPO; JPO; DERWENT USPAT	2004/06/02 15:09
_	2	("3616868") or ("4890682") or ("6029748") or ("6112818")).PN. ("6290004").PN.	USPAT; US-PGPUB;	2003/06/16 09:18
-	2	("6655460").PN.	EPO; JPO; DERWENT USPAT; US-PGPUB;	2004/06/02 09:50
-	0	(control\$4 near3 drill\$3) with (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing)) with (tool valve)	EPO; JPO; DERWENT USPAT; US-PGPUB; EPO; JPO;	2004/06/02 13:21
-	1	(control\$4 near3 drill\$3) same (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing)) same (tool valve)	DERWENT USPAT; US-PGPUB; EPO; JPO;	2004/06/02 14:43
-	17	(control\$4 near3 drill\$3) and (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing)) and (tool valve)	DERWENT USPAT; US-PGPUB; EPO; JPO;	2004/06/02 13:26
-	1	(control\$4 near3 drill\$3) same (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing))	DERWENT USPAT; US-PGPUB; EPO; JPO;	2004/06/02 14:43
-	20	(control\$4 near3 drill\$3) and (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing))	DERWENT USPAT; US-PGPUB; EPO; JPO;	2004/06/02 14:50
-	2	(control\$4 near3 drill\$3) and (electric\$3 near3 transmit\$4 near3 (tubular tubing pipe string casing)) and jar\$4	DERWENT USPAT; US-PGPUB;	2004/06/02 14:51
-	36	(solenoid near3 valve) with jar\$4	EPO; JPO; DERWENT USPAT; US-PGPUB;	2004/06/02 15:11
			EPO; JPO; DERWENT	

-	84	(solenoid near3 valve) same jar\$4	USPAT;	2004/06/02 15:19
			US-PGPUB,	
	-		EPO; JPO;	
	-		DERWENT	
-	2	("4796708").PN.	USPAT;	2004/06/02 15:19
ļ			US-PGPUB;	
			EPO; JPO;	
1			DERWENT	
-	201	(175/104).CCLS.	USPAT;	2004/06/03 07:50
			US-PGPUB;	
1			ЕРО; ЈРО;	ĺ
			DERWENT	
-	887	(175/61).CCLS.	USPAT;	2004/06/03 07:50
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
-	570	(175/57).CCLS.	USPAT;	2004/06/03 07:50
			US-PGPUB;	
			ЕРО; ЛРО;	
		((155(104) GOV 0.) 1 ((155(15) GOV 0.)	DERWENT	2004/06/02 07 52
-	10	((175/104).CCLS.) and ((175/57).CCLS.)	USPAT;	2004/06/03 07:52
			US-PGPUB;	
			EPO; JPO;	
		(/175/104) OOL 9) and (/175/51) OOL 9)	DERWENT	2004/06/02 07:52
-	7	((175/104).CCLS.) and ((175/61).CCLS.)	USPAT;	2004/06/03 07:52
			US-PGPUB;	
			EPO; JPO;	
1		İ	DERWENT	1